EduSahara™ Assignment

Name : Circle Basics

Chapter : Circles

Grade : SSC Grade IX

1. The mid-point of the diameter of a circle is called

   (i) chord (ii) circumference (iii) major segment (iv) centre (v) radius

2. A line segment joining any point on the circle with its centre is called

   (i) centre (ii) segment (iii) semi-circle (iv) chord (v) radius

3. A line segment having its end points on the circle is called a

   (i) diameter (ii) radius (iii) major segment (iv) circumference (v) chord

4. A chord that passes through the centre of the circle is called

   (i) centre (ii) semi-circle (iii) segment (iv) major segment (v) diameter

5. A chord of a circle divides the whole circular region into two parts, each called a

   (i) segment (ii) semi-circle (iii) chord (iv) circumference (v) diameter

6. The segment of the circle containing the centre of the circle is called

   (i) semi-circle (ii) segment (iii) circumference (iv) major segment (v) chord

7. Half of a circle is called

   (i) chord (ii) semi-circle (iii) radius (iv) centre (v) major segment

8. The perimeter of a circle is called

   (i) circumference (ii) diameter (iii) major segment (iv) centre (v) chord

9. Which of the following statements are true?

   a) A circle consists of an infinite number of points.
   b) Every circle has a unique diameter.
   c) Each radius of a circle is also a chord of the circle.
   d) Every circle has a unique centre.
   e) A line can meet a circle atmost at two points.

   (i) {b,a,d} (ii) {c,d} (iii) {b,a} (iv) {b,c,e} (v) {a,d,e}

10. Which of the following statements are true?

    a) Every circle has a unique diameter.
    b) One and only one tangent can be drawn to a circle from a point outside it.
    c) An infinite number of chords may be drawn for a circle.
    d) Two semi-circles of a circle together make the whole circle.
    e) An infinite number of diameters may be drawn for a circle.

    (i) {a,c,d} (ii) {b,d} (iii) {c,d,e} (iv) {a,b,e} (v) {a,c}

11. Which of the following statements are true?

a) Diameter of a circle is a part of the semi-circle of the circle.
b) A secant of a circle is a segment having its end points on the circle.
c) One and only one tangent can be drawn to a circle from a point outside it.
d) One and only one tangent can be drawn to pass through a point on a circle.
e) Every circle has a unique diameter.

(i) {c,d} (ii) {b,a} (iii) {c,d,a} (iv) {a,d} (v) {e,b,a}

12. If the diameter of a circle is 140 cm, what is its radius?

(i) 69 cm (ii) 70 cm (iii) 68 cm (iv) 71 cm (v) 72 cm

13. If the radius of a circle is 63 cm, what is its diameter?

(i) 127 cm (ii) 128 cm (iii) 126 cm (iv) 124 cm (v) 125 cm

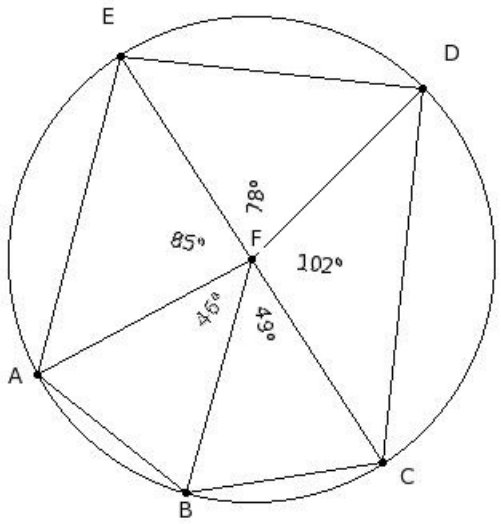
14. If the radius of a circle is 21 cm, what is its circumference?

(i) 132 cm (ii) 130 cm (iii) 133 cm (iv) 134 cm (v) 131 cm

15. Two circles with equal radii are

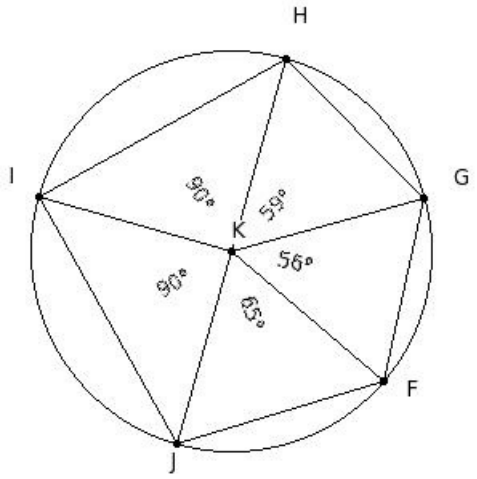
(i) only similar but not congruent (ii) not similar (iii) concentric (iv) congruent

16. The centre of the circle is



(i) B (ii) F (iii) D (iv) C (v) A

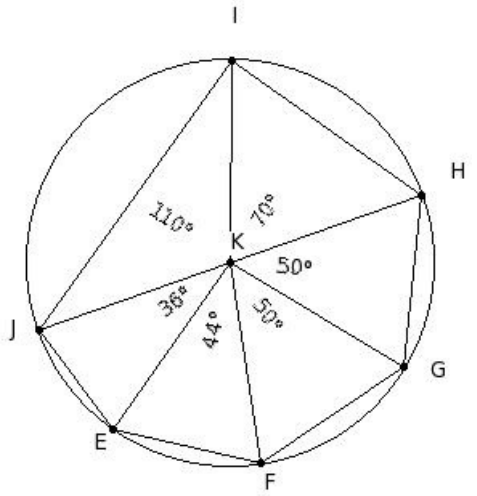
17. The chords of the circle are



(i) $\overline{FG}, \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JF}, \overline{HJ}$ (ii) $\overline{KF}, \overline{KG}, \overline{KH}, \overline{KI}, \overline{KJ}$ (iii) $\overline{FG}, \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JF}$ (iv) $\overline{FG}, \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JF}, \overline{KF}$

(v) $\overline{GH}, \overline{HI}, \overline{IJ}, \overline{JF}$

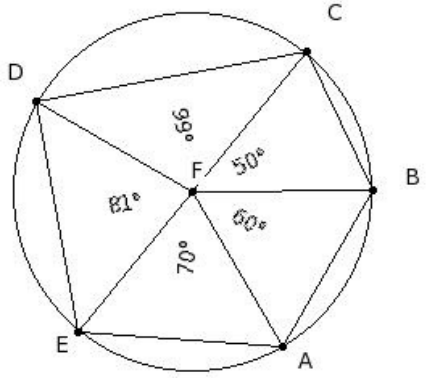
18. The diameters of the circle are



(i) $\overline{HJ}$ (ii) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JE}, \overline{HJ}$ (iii) $\overline{KE}, \overline{KF}, \overline{KG}, \overline{KH}, \overline{KI}, \overline{KJ}, \overline{HJ}$ (iv) $\overline{KE}, \overline{KF}, \overline{KG}, \overline{KH}, \overline{KI}, \overline{KJ}$

(v) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JE}$

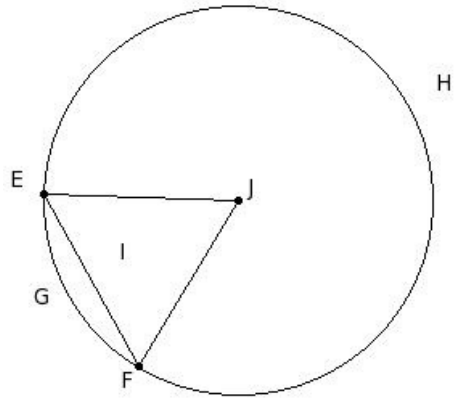
19. The radii of the circle are



(i) $\overline{FA}, \overline{FB}, \overline{FC}, \overline{FD}, \overline{FE}$ (ii) $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{EA}, \overline{CE}$ (iii) $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EA}$ (iv) $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{EA}, \overline{FD}$

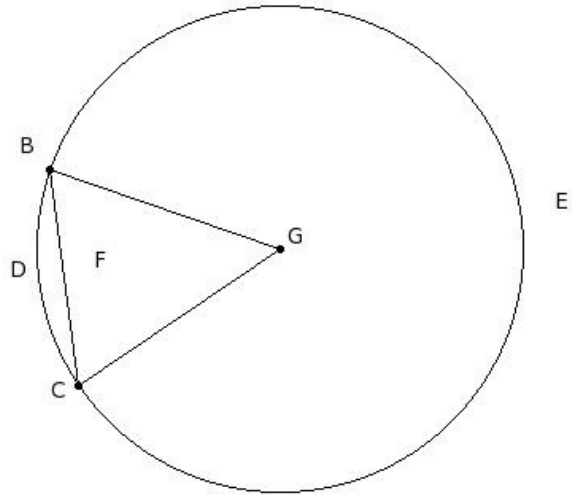
(v) $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{EA}$

20. The minor sector of the circle is



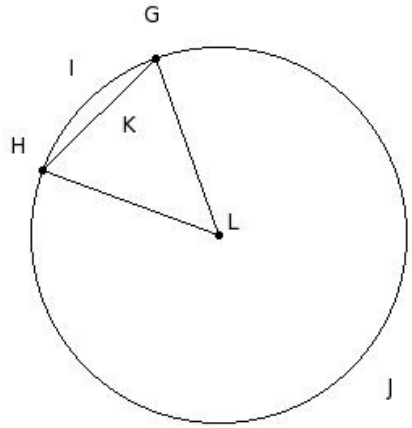
(i) EGFIE (ii) EHFIE (iii) JEHFJ (iv) JEGFJ (v) EHF

21. The major sector of the circle is



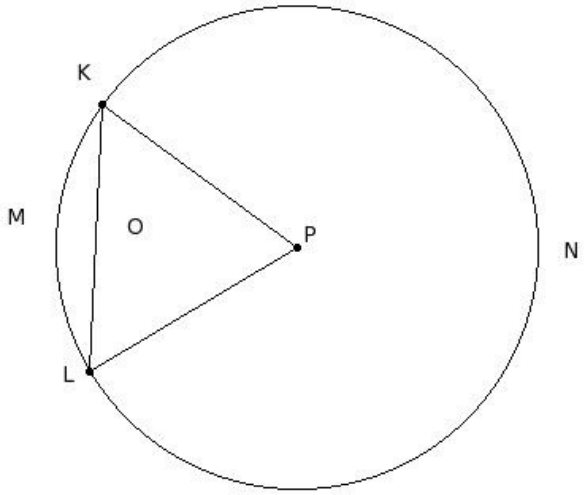
(i) BDCFB (ii) GBECG (iii) BECFB (iv) GBDCG (v) BEC

22. The minor arc of the circle is



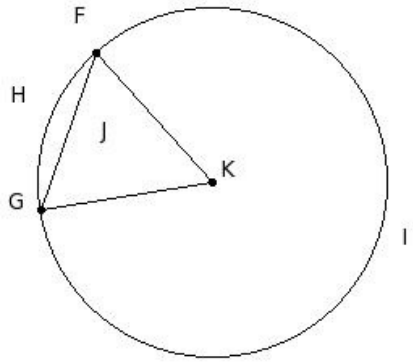
(i) GJH (ii) GJHKG (iii) GIHKG (iv) LGIHL (v) GIH

23. The major arc of the circle is



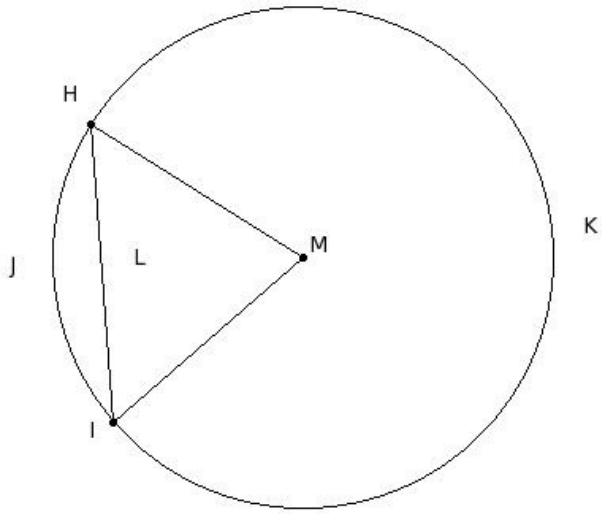
(i) PKMLP (ii) KNL (iii) KNLOK (iv) PKNLP (v) KML

24. The minor segment of the circle is



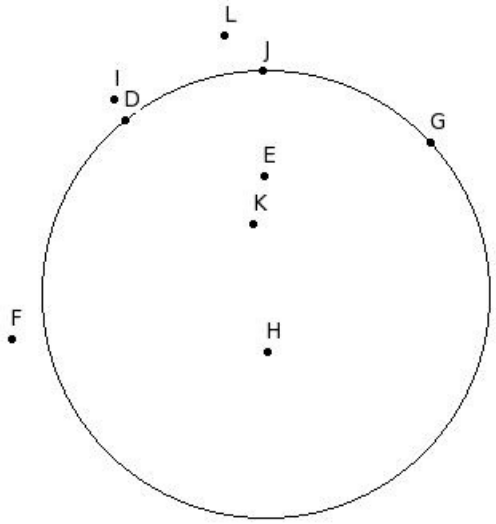
(i) FHGJF (ii) KFIGK (iii) FIGJF (iv) FIG (v) FHG

25. The major segment of the circle is



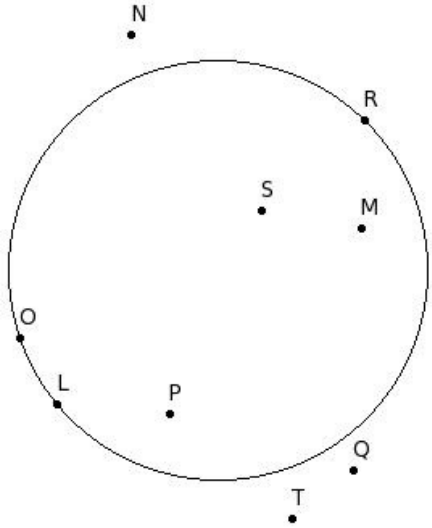
(i) MHKIM (ii) HJI (iii) HKILH (iv) HJILH (v) HKI

26. Find the points belonging to the circle



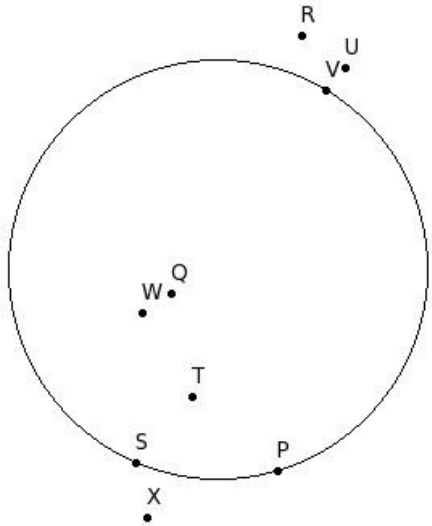
(i) {J,K,D} (ii) {E,H,K} (iii) {F,I,L} (iv) {D,J,F} (v) {D,G,J}

27. Find the points belonging to the inside of the circle



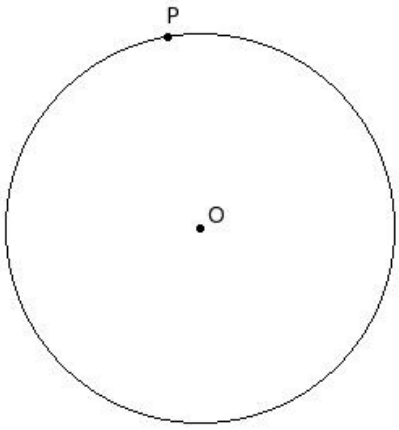
(i) {R,S,P} (ii) {N,Q,T} (iii) {L,O,R} (iv) {M,P,S} (v) {T,P,M}

28. Find the points belonging to the outside of the circle



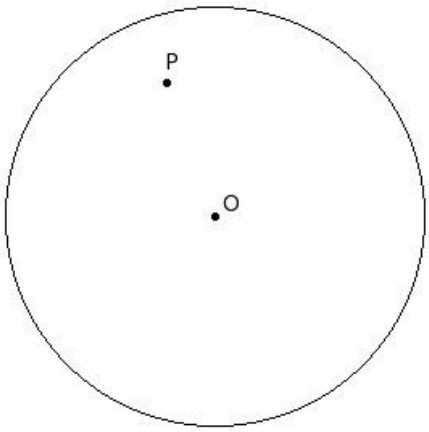
(i) {P,S,V} (ii) {X,T,U} (iii) {Q,T,W} (iv) {R,U,X} (v) {P,X,R}

29. 'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane. If $\overline{OP}$ = r ,then P is



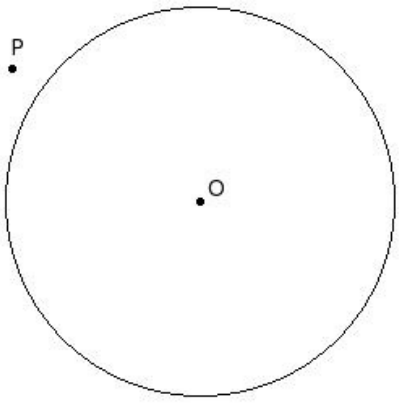
(i) outside the circle (ii) on the circle (iii) inside the circle

30. 'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane. If $\overline{OP}$ < r,then P is



(i) on the circle (ii) outside the circle (iii) inside the circle

31. 'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane. If $\overline{OP}$ > r,then P is



(i) outside the circle (ii) on the circle (iii) inside the circle

32. The distance around the circle is called

(i) chord (ii) radius (iii) arc (iv) diameter (v) circumference

33. A line which intersects the circle at two distinct points is called a

(i) semi-circle (ii) diameter (iii) segment (iv) secant (v) circumference

34. A line which touches a circle at only one point is called a

(i) quadrant (ii) major segment (iii) centre (iv) tangent (v) segment

35. If the two radii OP and OQ of a circle are at right angles to each other, then the sector OPQ is called a

(i) semi-circle (ii) radius (iii) major segment (iv) quadrant (v) centre

36. Which of the following statements are true?

a) A chord divides a circle into two sectors.
b) The diameter is the longest chord.
c) A chord divides a circle into two segments.
d) The radius is the shortest chord.
e) Atmost one chord can be drawn on a circle with a certain length.

(i) {b,c} (ii) {a,b} (iii) {d,c} (iv) {e,a,b} (v) {d,c,b}

37. Which of the following statements are true?

a) The longest chord of the circle passes through the centre of the circle.
b) Equal length chords subtend equal angles at the centre of the circle.
c) Equal length chords are equidistant from the centre of the circle.
d) The farther the chord is from the centre, the larger the angle it subtends at the centre.
e) No two chords bisects each other.

(i) {e,b} (ii) {d,a,b} (iii) {d,a} (iv) {a,b,c} (v) {d,e,c}

38. Which of the following statements are true?

a) The area enclosed by a chord and its minor arc is called minor segment.
b) A circle divides the plane on which it lies into three parts.
c) The diameter divides the circle into two unequal parts.
d) The area enclosed by a chord and its major arc is called major segment.
e) A sector is the area enclosed by two radii and a chord.

(i) {c,a} (ii) {e,b} (iii) {c,e,d} (iv) {c,a,b} (v) {a,b,d}

39. Which of the following statements are true?

a) The longest of all chords of a circle is called diameter.
b) A sector is the area enclosed by two radii and a chord.
c) The midpoint of any diameter of a circle is its centre.
d) The diameter divides the circle into two unequal parts.
e) Two chords bisect each other.

(i) {d,c} (ii) {d,c,a} (iii) {b,a} (iv) {e,b,a} (v) {a,c}

40. Which of the following statements are true?

a) Exactly two tangents can be drawn parallel to a secant.
b) Only one circle can be drawn with a centre.
c) Only one circle can be drawn passing through two points.
d) Atmost one circle can be drawn passing through three non-collinear points.
e) Infinite circles can be drawn passing through three collinear points.

(i) {c,d,a} (ii) {e,b,a} (iii) {b,a} (iv) {c,d} (v) {a,d}

41. The point of intersection of the angular bisectors of a triangle is

(i) excentre (ii) circumcentre (iii) centroid (iv) incentre (v) orthocentre

42. If the radius of the circumcircle is half the length of a side of the triangle, then the triangle is

(i) equilateral triangle (ii) acute angled triangle (iii) obtuse angled triangle (iv) right angle triangle

43. Circles having common centre are called

(i) concentric circles (ii) intersecting circles (iii) similar circles (iv) congruent circles

44. If two circles are concentric, then

(i) their perimeters are same (ii) their centres are same (iii) their radii are same

(iv) their diameters are same

45. Which of the following figures represent a chord ?

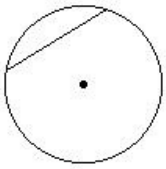


fig I

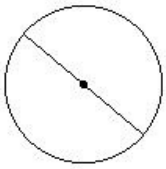


fig II

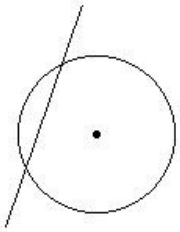


fig III

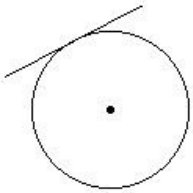


fig IV

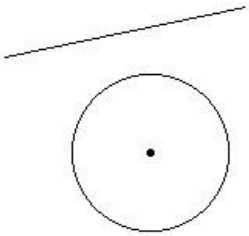


fig V

(i) fig IV (ii) fig I (iii) fig V (iv) fig III (v) fig II

46. Which of the following figures represent a diameter ?

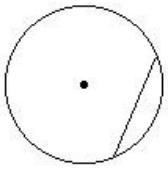


fig I

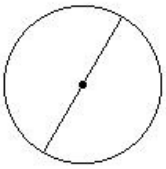


fig II

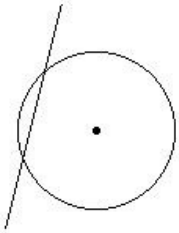


fig III

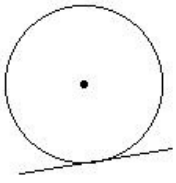


fig IV

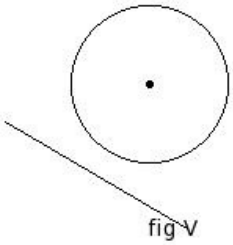


fig V

(i) fig IV (ii) fig III (iii) fig II (iv) fig V (v) fig I

47. Which of the following figures represent a secant ?

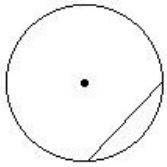


fig I

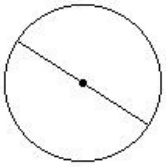


fig II

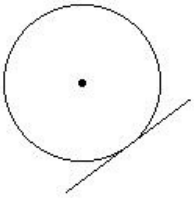


fig III

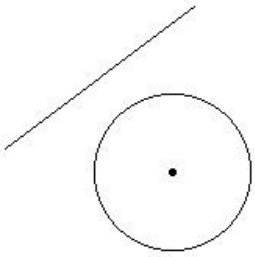


fig IV

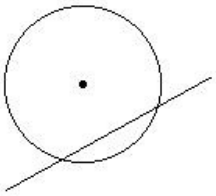


fig V

(i) fig V (ii) fig IV (iii) fig III (iv) fig II (v) fig I

48. Which of the following figures represent a tangent ?

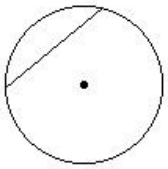


fig I

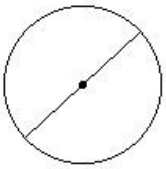


fig II

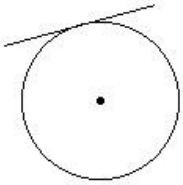


fig III

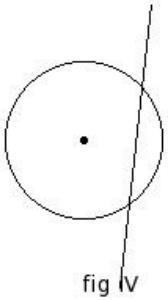


fig IV

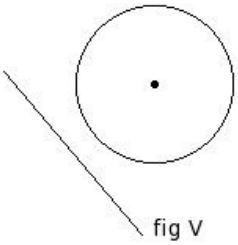


fig V

(i) fig III (ii) fig V (iii) fig II (iv) fig I (v) fig IV

49. In triangle IJK, if a circle is drawn with JK as diameter and if it passes through I it is a

(i) acute angled triangle (ii) equilateral triangle (iii) obtuse angled triangle (iv) right angle triangle

50. Which of the following statements are true?

a) A circle divides the plane into three mutually disjoint sets of points.

b) $\frac{22}{7}$ is a rational number.

c) All chords of a circle are diameters.

d) All diameters of a circle are chords.

e) π is a rational number.

(i) {c,a} (ii) {a,b,d} (iii) {e,b} (iv) {c,e,d} (v) {c,a,b}

51. Points which lie on the circumference of the circle are called

(i) Concyclic points (ii) Cyclic points (iii) Coincident points (iv) Similar points (v) Concurrent points

Assignment Key

1) (iv)	2) (v)	3) (v)	4) (v)	5) (i)	6) (iv)
7) (ii)	8) (i)	9) (v)	10) (iii)	11) (iv)	12) (ii)
13) (iii)	14) (i)	15) (iv)	16) (ii)	17) (iii)	18) (i)
19) (i)	20) (iv)	21) (ii)	22) (v)	23) (ii)	24) (i)
25) (iii)	26) (v)	27) (iv)	28) (iv)	29) (ii)	30) (iii)
31) (i)	32) (v)	33) (iv)	34) (iv)	35) (iv)	36) (i)
37) (iv)	38) (v)	39) (v)	40) (v)	41) (iv)	42) (iv)
43) (i)	44) (ii)	45) (ii)	46) (iii)	47) (i)	48) (i)
49) (iv)	50) (ii)	51) (i)			